

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 101575,537  
Source: TEP  
Date Processed by STIC: 9/21/06

***ENTERED***



IFWP

**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/10/575,537

DATE: 09/21/2006

TIME: 11:48:13

Input Set: A:\1034123-000219.ST25.txt  
 Output Set: N:\CRF4\09212006\J575537.raw

3 <110> APPLICANT: Gallo, Richard  
 4 Murakami, Masamoto  
 6 <120> TITLE OF INVENTION: HUMAN CATHELICIDIN ANTIMICROBIAL PEPTIDES  
 8 <130> FILE REFERENCE: 1034123-000219  
**C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/575,537**  
 11 <141> CURRENT FILING DATE: 2006-04-11  
 13 <150> PRIOR APPLICATION NUMBER: US 60/512,953  
 14 <151> PRIOR FILING DATE: 2003-10-21  
 16 <150> PRIOR APPLICATION NUMBER: PCT/US2004/034911  
 17 <151> PRIOR FILING DATE: 2004-10-20  
 19 <160> NUMBER OF SEQ ID NOS: 34  
 21 <170> SOFTWARE: PatentIn version 3.3  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 11  
 25 <212> TYPE: PRT  
 26 <213> ORGANISM: Homo sapiens  
 29 <220> FEATURE:  
**W--> 30 <221> NAME/KEY: X**  
 31 <222> LOCATION: (1)..(2)  
 32 <223> OTHER INFORMATION: K or R  
 34 <220> FEATURE:  
**W--> 35 <221> NAME/KEY: X**  
 36 <222> LOCATION: (3)..(3)  
 37 <223> OTHER INFORMATION: I or K  
 39 <220> FEATURE:  
**W--> 40 <221> NAME/KEY: X**  
 41 <222> LOCATION: (4)..(4)  
 42 <223> OTHER INFORMATION: V or G  
 44 <220> FEATURE:  
**W--> 45 <221> NAME/KEY: X**  
 46 <222> LOCATION: (5)..(5)  
 47 <223> OTHER INFORMATION: Q or R  
 49 <220> FEATURE:  
**W--> 50 <221> NAME/KEY: X**  
 51 <222> LOCATION: (6)..(6)  
 52 <223> OTHER INFORMATION: K or R  
 54 <220> FEATURE:  
**W--> 55 <221> NAME/KEY: X**  
 56 <222> LOCATION: (7)..(7)  
 57 <223> OTHER INFORMATION: any amino acid  
 59 <220> FEATURE:  
**W--> 60 <221> NAME/KEY: X**  
 61 <222> LOCATION: (8)..(8)

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62 <223> OTHER INFORMATION: L or F
64 <220> FEATURE:
W--> 65 <221> NAME/KEY: X
66 <222> LOCATION: (9)..(11)
67 <223> OTHER INFORMATION: any amino acid
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    72 1           5           10
75 <210> SEQ ID NO: 2
76 <211> LENGTH: 11
77 <212> TYPE: PRT
78 <213> ORGANISM: Homo sapiens
80 <400> SEQUENCE: 2
82 Lys Arg Ile Val Gln Arg Ile Lys Asp Val Phe
    83 1           5           10
86 <210> SEQ ID NO: 3
87 <211> LENGTH: 8
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 3
93 Arg Lys Ser Lys Glu Lys Ile Gly
    94 1           5
97 <210> SEQ ID NO: 4
98 <211> LENGTH: 8
99 <212> TYPE: PRT
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 4
104 Lys Ser Lys Glu Lys Ile Gly Lys
    105 1           5
108 <210> SEQ ID NO: 5
109 <211> LENGTH: 739
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapiens
113 <400> SEQUENCE: 5
114 taaagcaaac cccagccccac accctggcag gcagccaggg atgggtggat caggaaggct      60
116 cctggttggg cttttgcatac aggctcaggc tgggcataaa ggaggctct gtgggctaga     120
118 gggaggcaga catggggacc atgaagaccc aaaggggatgg ccactccctg gggcggtggt     180
120 cactggtgct cctgctgctg ggcctggta tgcctctggc catcattgcc caggtcctca     240
122 gctacaagga agctgtgctt cgtgctatacg atggcatcaa ccagcggtcc tcggatgcta     300
124 acctctaccg cctctggac ctggacccca gcccacgat ggatggggac ccagacacgc     360
126 caaaggctgt gagcttcaca gtgaaggaga cagtgtgccc caggacgaca cagcagtcac     420
128 cagaggattt tgacttcaag aaggacgggc tggtaagcg gtgtatgggg acagtgaccc     480
130 tcaaccaggc caggggctcc tttgacatca gttgtgataa ggataacaag agatttgc     540
132 tgctgggtga tttctccgg aaatctaaag agaagattgg caaagagttt aaaagaattt     600
134 tccagagaat caaggatttt ttgcggaaatc ttgtacccag gacagagtcc tagtgtgtgc     660
136 cctaccctgg ctcaggcttc tggctctga gaaataaaact atgagagcaa tttcaaaaaaa     720
138 aaaaaaaaaa aaaaaaaaaa                                         739
141 <210> SEQ ID NO: 6
142 <211> LENGTH: 170

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Input Set : A:\1034123-000219.ST25.txt  
 Output Set: N:\CRF4\09212006\J575537.raw

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143 <212> TYPE: PRT
144 <213> ORGANISM: Homo sapiens
146 <400> SEQUENCE: 6
148 Met Lys Thr Gln Arg Asn Gly His Ser Leu Gly Arg Trp Ser Leu Val
149 1 5 10 15
152 Leu Leu Leu Leu Gly Leu Val Met Pro Leu Ala Ile Ile Ala Gln Val
153 20 25 30
156 Leu Ser Tyr Lys Giu Ala Val Leu Arg Ala Ile Asp Gly Ile Asn Gln
157 35 40 45
160 Arg Ser Ser Asp Ala Asn Leu Tyr Arg Leu Leu Asp Leu Asp Pro Arg
161 50 55 60
164 Pro Thr Met Asp Gly Asp Pro Asp Thr Pro Lys Pro Val Ser Phe Thr
165 65 70 75 80
168 Val Lys Glu Thr Val Cys Pro Arg Thr Thr Gln Gln Ser Pro Glu Asp
169 85 90 95
172 Cys Asp Phe Lys Lys Asp Gly Leu Val Lys Arg Cys Met Gly Thr Val
173 100 105 110
176 Thr Leu Asn Gln Ala Arg Gly Ser Phe Asp Ile Ser Cys Asp Lys Asp
177 115 120 125
180 Asn Lys Arg Phe Ala Leu Leu Gly Asp Phe Phe Arg Lys Ser Lys Glu
181 130 135 140
184 Lys Ile Gly Lys Glu Phe Lys Arg Ile Val Gln Arg Ile Asp Asp Phe
185 145 150 155 160
188 Leu Arg Asn Leu Val Pro Arg Thr Glu Ser
189 165 170
192 <210> SEQ ID NO: 7
193 <211> LENGTH: 519
194 <212> TYPE: DNA
195 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 7
198 atgcagttcc agagggacgt cccctccctg tggctgtggc ggtcaactatc actgctgctg 60
200 ctactgggcc tggggttctc ccagaccccc agctacaggg atgctgtgtct ccgagctgtg 120
202 gatgacttca accagcagtc cctagacacc aatcttacc gtctccttggc cctggatcct 180
204 gagccccaag gggacgagga tccagatact cccaaatcttg tgagggttccg agtgaaggag 240
206 actgttatgtg gcaaggcaga gcggcagcta cctgagcaat gtgccttcaa ggaacaggggg 300
208 gtggtaagc agtgtatggg ggcagtccacc ctgaacccgg ccgctgattc ttttgacatc 360
210 agctgttaacg agcctgggtgc acagccctt cggtcaaga aaatttcccg gctggcttgg 420
212 cttctccgca aagggtggga gaagatttgt gaaaagctta agaaaattgg ccagaaaatt 480
214 aagaattttt ttcagaaact tgtccctcag ccagagtag 519
217 <210> SEQ ID NO: 8
218 <211> LENGTH: 173
219 <212> TYPE: PRT
220 <213> ORGANISM: murine
222 <400> SEQUENCE: 8
224 Met Gln Phe Gln Arg Asp Val Pro Ser Leu Trp Leu Trp Arg Ser Leu
225 1 5 10 15
228 Ser Leu Leu Leu Leu Leu Gly Leu Gly Phe Ser Gln Thr Pro Ser Tyr
229 20 25 30
232 Arg Asp Ala Val Leu Arg Ala Val Asp Asp Phe Asn Gln Gln Ser Leu

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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/575,537**

**DATE: 09/21/2006**  
**TIME: 11:48:13**

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**Output Set: N:\CRF4\09212006\J575537.raw**

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233      35          40          45
236 Asp Thr Asn Leu Tyr Arg Leu Leu Asp Leu Asp Pro Glu Pro Gln Gly
237      50          55          60
240 Asp Glu Asp Pro Asp Thr Pro Lys Ser Val Arg Phe Arg Val Lys Glu
241      65          70          75          80
244 Thr Val Cys Gly Lys Ala Glu Arg Gln Leu Pro Glu Gln Cys Ala Phe
245      85          90          95
248 Lys Glu Gln Gly Val Val Lys Gln Cys Met Gly Ala Val Thr Leu Asn
249      100         105         110
252 Pro Ala Ala Asp Ser Phe Asp Ile Ser Cys Asn Glu Pro Gly Ala Gln
253      115         120         125
256 Pro Phe Arg Phe Lys Lys Ile Ser Arg Leu Ala Gly Leu Leu Arg Lys
257      130         135         140
260 Gly Gly Glu Lys Ile Gly Glu Lys Leu Lys Lys Ile Gly Gln Lys Ile
261      145         150         155          160
264 Lys Asn Phe Phe Gln Lys Leu Val Pro Gln Pro Glu Gln
265      165         170
268 <210> SEQ ID NO: 9
269 <211> LENGTH: 172
270 <212> TYPE: PRT
271 <213> ORGANISM: canine
273 <400> SEQUENCE: 9
275 Met Glu Thr Gln Lys Asp Ser Pro Ser Leu Gly Arg Trp Ser Leu Leu
276 1      5          10          15
279 Leu Leu Leu Leu Gly Leu Val Ile Thr Pro Ala Ala Ser Arg Ala Leu
280      20         25          30
283 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Asn Gly Phe Asn Gln Arg
284      35         40          45
287 Ser Ser Glu Glu Asn Leu Tyr Arg Leu Leu Gln Leu Asn Ser Gln Pro
288      50         55          60
291 Lys Gly Asp Glu Asp Pro Asn Ile Pro Lys Pro Val Ser Phe Thr Val
292 65      70          75          80
295 Lys Glu Thr Val Cys Pro Lys Thr Thr Gln Gln Pro Leu Glu Gln Cys
296      85         90          95
299 Gly Phe Lys Asp Asn Gly Leu Val Lys Gln Cys Glu Gly Thr Val Ile
300      100        105         110
303 Leu Asp Glu Asp Thr Gly Tyr Phe Asp Leu Asn Cys Asp Ser Ile Leu
304      115        120         125
307 Gln Val Lys Lys Ile Asp Arg Leu Lys Glu Leu Ile Thr Thr Gly Ala
308      130        135         140
311 Gln Lys Ile Gly Lys Ile Arg Arg Ile Gly Gln Arg Ile Lys Asp
312 145      150        155          160
315 Phe Leu Lys Asn Leu Gln Pro Arg Glu Glu Lys Ser
316      165        170
319 <210> SEQ ID NO: 10
320 <211> LENGTH: 172
321 <212> TYPE: PRT
322 <213> ORGANISM: porcine
324 <400> SEQUENCE: 10

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/575,537

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326 Met Glu Thr Gln Arg Ala Ser Leu Cys Leu Gly Arg Trp Ser Leu Trp  
 327 1 5 10 15  
 330 Leu Leu Leu Leu Ala Leu Val Val Pro Ser Ala Ser Ala Gln Ala Leu  
 331 20 25 30  
 334 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Asp Arg Leu Asn Glu Gln  
 335 35 40 45  
 338 Ser Ser Glu Ala Asn Leu Tyr Arg Leu Leu Glu Leu Asp Gln Pro Pro  
 339 50 55 60  
 342 Lys Ala Asp Glu Asp Pro Gly Thr Pro Lys Pro Val Ser Phe Thr Val  
 343 65 70 75 80  
 346 Lys Glu Thr Val Cys Pro Arg Pro Thr Arg Gln Pro Pro Glu Leu Cys  
 347 85 90 95  
 350 Asp Phe Lys Glu Asn Gly Arg Val Lys Gln Cys Val Gly Thr Val Thr  
 351 100 105 110  
 354 Leu Asn Pro Ser Ile His Ser Leu Asp Ile Ser Cys Asn Glu Ile Gln  
 355 115 120 125  
 358 Ser Val Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro  
 359 130 135 140  
 362 Pro Pro Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe  
 363 145 150 155 160  
 366 Pro Pro Arg Phe Pro Pro Arg Phe Pro Gly Lys Arg  
 367 165 170  
 370 <210> SEQ ID NO: 11  
 371 <211> LENGTH: 176  
 372 <212> TYPE: PRT  
 373 <213> ORGANISM: goat  
 375 <400> SEQUENCE: 11  
 377 Met Glu Thr Gln Gly Ala Ser Leu Ser Leu Gly Arg Trp Ser Leu Trp  
 378 1 5 10 15  
 381 Leu Leu Leu Leu Gly Leu Val Val Pro Leu Ala Ser Ala Gln Ala Leu  
 382 20 25 30  
 385 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Gly Gln Leu Asn Glu Arg  
 386 35 40 45  
 389 Ser Ser Glu Ala Asn Leu Tyr Arg Leu Leu Glu Leu Asp Pro Ala Pro  
 390 50 55 60  
 393 Asn Asp Glu Val Asp Pro Gly Thr Arg Lys Pro Val Ser Phe Thr Val  
 394 65 70 75 80  
 397 Lys Glu Thr Val Cys Pro Arg Thr Thr Gln Gln Pro Pro Glu Glu Cys  
 398 85 90 95  
 401 Asp Phe Lys Glu Asn Gly Leu Val Lys Gln Cys Val Gly Thr Val Thr  
 402 100 105 110  
 405 Leu Asp Pro Ser Asn Asp Gln Phe Asp Ile Asn Cys Asn Glu Leu Gln  
 406 115 120 125  
 409 Ser Val Arg Phe Arg Pro Pro Ile Arg Arg Pro Pro Ile Arg Pro Pro  
 410 130 135 140  
 413 Phe Asn Pro Pro Phe Arg Pro Pro Val Arg Pro Pro Phe Arg Pro Pro  
 414 145 150 155 160  
 417 Phe Arg Pro Pro Phe Arg Pro Pro Ile Gly Pro Phe Pro Gly Arg Arg  
 418 165 170 175

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 09/21/2006  
PATENT APPLICATION: US/10/575,537                   TIME: 11:48:14

Input Set : A:\1034123-000219.ST25.txt  
Output Set: N:\CRF4\09212006\J575537.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. ~~1,2,3,4,5,6,7,8,9,10,11~~

**VERIFICATION SUMMARY** DATE: 09/21/2006  
PATENT APPLICATION: US/10/575,537 TIME: 11:48:14

Input Set : A:\1034123-000219.ST25.txt  
Output Set: N:\CRF4\09212006\J575537.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:30 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:35 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:40 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:45 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:50 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:55 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:60 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:65 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0